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BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER

DIVECHA, KAMAL B

ART UNIT	PAPER NUMBER
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2151

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/991,234

Applicant(s)

CHANDRA ET AL.

Examiner

KAMAL B. DIVECHA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-9, 23-25 and 30-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-9, 23-25 and 30-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20061023</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Claims 6-9, 23-25, 30-33 are pending in this application.

Claims 1-5, 10-22, 26-29 are cancelled in this application.

Applicant's arguments filed October 23, 2006 with respect to claims 6-9, 23-25, 30-33 have been fully considered but they are not persuasive.

In response filed, applicant argues in substance that:

- a. Claims 23-25 and 30-33 are directed towards the statutory subject matter (remarks, page 6-7).

In response to argument [a], Examiner respectfully disagrees.

Claim 23 recites:

A machine-readable medium that provides instructions, which when executed by a set of one or more processors, cause said set of processors to perform operations comprising:

- maintaining a first set of information for a first layer 3 virtual private network, the first set of information for including a first value identifying the first layer 3 VPN;
- separately maintaining a second set of information for a second layer 3 VPN, the second set of information for including a second value identifying the second layer 3 VPN, wherein the first and second sets of information corresponds to a first and second customers accessing a backbone and maintained within a single network element of the backbone, and wherein the first and second sets of information include sufficient information to establish the first and second layer 3 VPNs with other network elements of the backbone for the first and second customer respectively;
- associating the first value with a first route distinguisher;
- associating the second value with a second route distinguisher; and
- maintaining a single exterior gateway protocol table for the first and second layer 3 VPNS.

As shown in the previous office action, Claims 23-33 are directed towards a non-statutory subject matter because specification is evidenced to define the "machine-readable medium" to include read only memory, random access memory, magnetic disk storage media, optical storage media, flash memory devices, electrical, optical, acoustical, or other form of propagated signals

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(e.g. carrier waves, infrared signals, digital signals, etc.), which are considered non-statutory subject matter. O'Reilly, 56 U. S. (15 How.) at 112-14.

Claims that recite nothing but the physical characteristics of a form of energy, such as frequency, voltage or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U. S. (15 How.) at 112-14.

Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in 35 U. S. C. § 101.

Claims 24-25, 30-33 does not cure the deficiencies of claim 23. Therefore claims 24-25, 30-33 are rejected for the same reasons as set forth in claim 23.

For the at least these reasons, applicant argument is considered not persuasive.

b. Applicant disagrees with the examiner assertion that any set of information in Rekhtar should be interpreted as “context” (remarks, page 7-8).

In response to argument [b], Examiner disagrees.

Applicant's disclosure is evident to define the term “context” as a set of information and/or collection of data structures for a customer of a network provider's network element (See specification, page 5 [0021]).

The fact that the term context is used to refer to a set of information is sufficient for interpreting the term as interpreted in the rejection.

See Also MPEP 2106, section II (C): “Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the

claim. *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999).

No further explanation is required as the usage of the term has been explicitly defined in the specification and its clear in its context.

Also note that: Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted “in view of the specification” without importing limitations from the specification into the claims unnecessarily). *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

Applicant, on page 8 of remarks, cites various passages from the specification to convey the specific meaning of the term context, however, as noted above, the specification is not read into the claims. Applicant is advised to include this specific meaning in the claims.

For the at least these reasons, the argument is considered not persuasive.

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c. Rekhtar does not disclose sharing a FIB among different VPNs (remarks, page 9).

In response to argument [c], Examiner respectfully disagrees.

Claim 6 recites:

A computer implemented method comprising:

maintaining a first set of information for a first layer 3 virtual private network, the first set of information for including a first value identifying the first layer 3 VPN;

separately maintaining a second set of information for a second layer 3 VPN, the second set of information for including a second value identifying the second layer 3 VPN, wherein the first and second sets of information corresponds to a first and second customers accessing a backbone and maintained within a single network element of the backbone, and wherein the first and second sets of information include sufficient information to establish the first and second layer 3 VPNs with other network elements of the backbone for the first and second customer respectively;

associating the first value with a first route distinguisher;

associating the second value with a second route distinguisher; and

maintaining a single exterior gateway protocol table for the first and second layer 3

VPNS.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., sharing a FIB among different VPNs) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In fact, the term "sharing" does not appear in the claim at all.

For the at least this reason, applicant argument is considered not persuasive.

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d. Rekhtar does not describe “maintaining a single exterior gateway protocol table for the first and second layer 3 virtual private networks” (remarks, page 9).

In response to argument [d], Examiner respectfully disagrees.

Rekhtar, at column 33 line 36, clearly states: “Also, although we have described VPN-specific information as being stored in separate tables because the approach seems most convenient, there is no reason in principle why a common table containing VPN-identifying entries could not be used instead”.

In other words, Rekhtar teaches maintaining a common table, i.e. a single EGP table for the VPNs such as VPN V, VPN W, etc.

Therefore, applicant argument directed towards the distinction between the prior art and claimed invention, based on this feature, is considered not persuasive. As such, REJECTION IS MAINTAINED.

DETAILED ACTION

Specification

The objection presented in the previous office action has been withdrawn due to cancellation of claims 1-5.

Claim Objections

The objection presented in the previous office action has been withdrawn due to recitation of the acronyms in its entire form.

Claim Rejections - 35 USC § 112

The rejection presented in the previous office action has been withdrawn due to cancellation of claims 1-5.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 23-25 and 30-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 23-25, 30-33 are non-statutory because specification is evidenced to define the “machine-readable medium” to include read only memory, random access memory, magnetic disk storage media, optical storage media, flash memory devices, electrical, optical, acoustical, or other form of propagated signals (e.g. carrier waves, infrared signals, digital signals, etc.), which does not fall within any of the four classes and/or categories of patentable subject matter set forth in 35 U. S. C. § 101.

Claims that recite nothing but the physical characteristics of a form of energy, such as frequency, voltage or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U. S. (15 How.) at 112-14.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 6-9 and 23-25, and 30-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Rekhtar et al. (hereinafter Rekhtar, U. S. Patent No. 6,339,595 B1).

As per claim 6, Rekhtar discloses a computer implemented method comprising:
maintaining a first context for a first layer 3 VPN, the first context including a first value identifying the first layer 3 VPN (col. 18 L28 to col. 19 L60, col. 20 L60-62); separately maintaining a second context for a second layer 3 VPN, the second context including a second value identifying the second layer 3 VPN, wherein the first and second sets of information corresponds to a first and second customers accessing a backbone and maintained within a single network element of the backbone, and wherein the first and second sets of information include sufficient information to establish the first and second layer 3 VPNs with other network elements of the backbone for the first and second customer respectively (col. 18 L28 to col. 20 L4); associating the first value with a first route distinguisher (col. 19 L52-56); associating the second

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value with a second route distinguisher (col. 18 L12 to col. 19 L4); maintaining a single EGP table for the first and second layer 3 VPNs (col. 11 L13-18, col. 33 L29-41).

As per claim 7, Rekhtar discloses the process of separately maintaining a third context for a non-VPN customer, the third context including a third value identifying the non-VPN customer (col. 9 L32-62) and maintaining a second EGP table for the non-VPN customer (col. 9 L32-44 and col. 11 L15-18).

As per claim 8, Rekhtar discloses the process of maintaining a first routing table for the first layer 3 VPN (col. 4 L34-38, col. 8 L56-67); maintaining a second routing table for the second layer 3 VPN (col. 6 L41-50, col. 9 L28-44); updating a set of entries for the first layer 3 VPN in the single EGP table, each of the set of entries indicating the first route distinguisher (col. 11 L5-60 and col. 16 L5-33); mapping the first route distinguisher to the first value (col. 18 L12-67) and indicating the mapped first value in communication about the updated set of entries (col. 19 L5-67, col. 12 L65-67, col. 19 L61 to col. 20 L4).

As per claim 9, Rekhtar discloses the process of maintaining a data structure for the single EGP table, the data structure indicating the association between the first value and the first route distinguisher and between the second value and the second route distinguisher (col. 19 L5 to col. 20 L32, col. 8 L56 to col. 9 L51) and performing mappings between the first value and the first route distinguisher and between the second value and the second route distinguisher with the data structure (col. 11 L45-59, col. 12 L65 to col. 13 L35, col. 18 L58-67, col. 19 L52-56).

As per claim 25, Rekhtar discloses the process wherein the mappings are performed for communications about the single EGP table (col. 19 L5 to col. 20 L3).

As per claims 23-24 and 30-33, they do not teach or further define over the limitations in claims 6-9 and 25. Therefore, claims 23-24 and 30-33 are rejected for the same reasons as set forth in claims 6-9 and 25.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Arrow et al., U. S. Patent No. 6,226,751 B1.
- b. Tabata, Pub. No.: US 2001/0016914 A1.
- c. Rekhtar et al., U. S. Patent No. 6,526,056 B1.
- d. Rekhtar et al., U. S. Patent No. 6,463,061 B1.
- e. Cheline et al., Pub. No.: US 2003/0041136 A1.
- f. Gonda et al., U. S. Patent No. 6,662,221 B1.
- g. Branigan et al., Pub. No.: US 2002/0090089 A1.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kamal Divecha
Art Unit 2151
January 18, 2007.



ZARNI MAUNG
SUPERVISORY PATENT EXAMINER